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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,712	11/30/2000	Christian Bourget	20510-9.00	4875

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EXAMINER

HO, DUC CHI

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/728,712

Applicant(s)

BOURGET ET AL.

Examiner

Duc C Ho

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 2-3 are objected to because of the following informalities: The word "by", in claim 2-line 9, and claim 3-line 11, appears to be a typo error.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "said weighting" in line 20. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "said cyclic prefix model" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2665

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-7, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Tellado et al.(US 6,512,797), hereinafter referred as Tellado.

Regarding claim 1, Tellado discloses peak to average power ratio reduction.

A transmitter for use in a multicarrier communication system, the transmitter for transmitting a multicarrier symbol (see fig. 11, and col. 12, lines 10-11), the multicarrier symbol having a peak-to-average power ratio (PAR) and being a function of a plurality of information signals (see col. 12, lines 26-28, and col. 27, lines 7-18), the transmitter comprising:

(a) a power reducer (the applicator 206-fig. 11), wherein the power reducer is operative to reduce the PAR of the multicarrier symbol by modifying a selected information signal of the plurality of information signals (see col. 12, lines 23-28) wherein the modified signal includes an information component, a peak reduction component (see col. 17, lines 39-51), and a transmission channel response component (see col. 25, lines 3-11).

Regarding claim 2, Tellado discloses in figure 12,

means for analyzing the multicarrier symbol (Kernel engine 222-fig. 12) to detect a peak in the multicarrier symbol (see col. 13, lines 17-19) col. 32, lines 6-7);

means for determining the first signal of the plurality of signals that contributes to the peak (see col. 33, lines 1-2);

means for modifying the first signal by applying a peak reduction component to the first signal, the peak reduction component including a transmission channel component such that the PAR of the multicarrier symbol is reduced to compensate for the transmission channel effects on the power of the symbol (see col. 33, lines 3-9).

Regarding claim 3, this claim has similar limitations as claim 2. Therefore, it is rejected under Tellado for the same reasons set forth in the rejection of claim 2.

Regarding claim 4, Tellado discloses an impulse response of the channel, see col. 26, lines 26-28.

Regarding claim 5, Tellado discloses impulse response of filter, see col. 13, lines 60-65, and col. 25, lines 3-11.

Regarding claim 6, this claim has similar limitations as claims 3-5. Therefore, it is rejected under Tellado for the same reasons set forth in the rejection of claims 3-5.

Regarding claim 7, this claim has similar limitations as claims 3-5. Therefore, it is rejected under Tellado for the same reasons set forth in the rejection of claims 3-5. See also col. 3, lines 6-28.

Regarding claim 11, this claim has similar limitations as claim 6. Therefore, it is rejected under Tellado for the same reasons set forth in the rejection of claim 6.

Allowable Subject Matter

6. Claim 8-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action, and to include all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Feig et al. (US 5,268,938); Awater et al. (US 6,175,551), Carney (US 5,838,732) are cited to show a method for receiving information, apparatus for receiving information and medium, which is considered pertinent to the claimed invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (703) 305-1332. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4750

9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703)- 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Patent Examiner

Duc Ho

03-19-04

